

IN THE CLAIMS:

Claims 1-4 have been amended herein. All of the pending claims 1 through 4 are presented below. This listing of claims will replace all prior versions and listings in the application. Please enter these claims as amended.

1. (Currently Amended) An assembly method for a Chip On Board semiconductor device having a semiconductor die having a heat sink cap abutting a portion of ~~the~~ a top surface of a substrate including:
placing a compliant ~~adhesive~~ adhesive-filled gel silicone elastomer between a portion of an upper surface of ~~said the~~ the semiconductor die and a portion of a lower surface of ~~said the~~ the heat sink cap;
pressing ~~said the~~ the semiconductor die into ~~said the~~ the heat sink cap to engage ~~said the~~ the semiconductor die and heat sink cap in compliant removable adhesion and for causing the edge of the heat sink cap to abut the substrate; and
injecting an encapsulant into ~~said the~~ the heat sink cap engaging at least interior portions of ~~said the~~ the heat sink cap, at least portions of ~~said the~~ the semiconductor die, at least portions of ~~an upper~~ the top surface of ~~said the~~ the substrate, and at least portions of ~~said the~~ the compliant adhesive-filled gel silicone elastomer.

2. (Currently Amended) The method of claim 1, wherein ~~said the~~ the compliant ~~adhesive~~ adhesive-filled gel silicone elastomer includes a cross-linked silicone.

3. (Currently Amended) An assembly method for a Chip On Board semiconductor device having a semiconductor die contained within a portion of a cap having a lower edge abutting a portion of a top surface of a substrate comprising:
positioning¹ a compliant ~~adhesive~~ adhesive-filled gel silicone elastomer between ~~said the~~ the semiconductor die and ~~said the~~ the cap;

pressing ~~said the~~ semiconductor die into ~~said the~~ cap causing removable adhesion of ~~said the~~ semiconductor die and ~~said the~~ cap and causing the lower edge of ~~said the~~ cap to abut ~~said the~~ substrate; and
injecting an encapsulant into ~~said the~~ cap engaging at least interior portions of ~~said the~~ cap, at least portions of ~~said the~~ semiconductor die, at least portions of ~~an upper~~ the top surface of ~~said the~~ substrate, and at least portions of ~~said the compliant adhesive-~~filled gel silicone elastomer.

4. (Currently Amended) The method of claim 3, wherein ~~said adhesive the~~ adhesive-filled gel silicone elastomer includes a ~~metal-metal-~~filled cross-linked silicone.

Serial No. - Unknown

IN THE DRAWINGS:

The attached sheets of drawings include changes to FIGS. 3A, 3G, and 4A. These sheets, which include 3A, 3G, and 4A, replace the original sheets including 3A, 3B, 3C, 3D, 3E, 3F, 3G, 4A, 4B, 4C, and 4D.